

A62 LIFE-SAVING; FIRE-FIGHTING (ladders E06C)

A62D CHEMICAL MEANS FOR EXTINGUISHING FIRES; PROCESSES FOR MAKING HARMFUL CHEMICAL SUBSTANCES HARMLESS, OR LESS HARMFUL, BY EFFECTING A CHEMICAL CHANGE; COMPOSITION OF MATERIALS FOR COVERINGS OR CLOTHING FOR PROTECTING AGAINST HARMFUL CHEMICAL AGENTS; COMPOSITION OF MATERIALS FOR TRANSPARENT PARTS OF GAS-MASKS, RESPIRATORS, BREATHING BAGS OR HELMETS; COMPOSITION OF CHEMICAL MATERIALS FOR USE IN BREATHING APPARATUS

Processes using enzymes or micro-organisms in order to:

- (i) liberate, separate or purify a pre-existing compound or composition, or to
 - (ii) treat textiles or clean solid surfaces of materials
- are further classified in subclass C12S. [5]

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| 1/00 | Fire-extinguishing compositions; Use of chemical substances in extinguishing fires (fireproof paints C09D 5/18; fireproofing materials C09K 21/00) | 3/15 | . . . to particle radiation, e.g. electron beam radiation [2007.01] |
| 1/02 | . containing or yielding a gas phase, e.g. foams (A62D 1/06, A62D 1/08 take precedence) [3] | 3/17 | . . . to electromagnetic radiation, e.g. emitted by a laser [2007.01] |
| 1/04 | . . characterised by the foam stabiliser [3] | 3/172 | . . . Gamma rays, i.e. radiation having a wavelength of about 0.003 to 0.03 nm [2007.01] |
| 1/06 | . containing gas-producing, chemically-reactive components [3] | 3/174 | . . . X-rays, i.e. radiation having a wavelength of about 0.03 to 3 nm [2007.01] |
| 1/08 | . containing volatile or gas-charged liquids [3] | 3/176 | . . . Ultraviolet radiation, i.e. radiation having a wavelength of about 3 to 400 nm [2007.01] |
| 3/00 | Processes for making harmful chemical substances harmless, or less harmful, by effecting a chemical change in the substances (consuming noxious gases by combustion F23G 7/06) [1,2007.01] | 3/178 | . . . Microwave radiation, i.e. radiation having a wavelength of about 0.3 to 30 cm [2007.01] |
| (1) | This group does not cover: <ul style="list-style-type: none"> – chemical or physico-chemical type processes where eradicating or diminishing the dangerousness of harmful chemical substances produces useful products (e.g. cement). These types of processes are covered by the appropriate subclass for making the specific product. However, in situations where processes for making products include a subset of process steps with eradicating or diminishing the dangerousness of a harmful chemical substance as its fundamental goal, and this subset is in itself novel and unobvious, this subset is covered by group A62D 3/00. [2007.01] | 3/19 | . . . to plasma [2007.01] |
| (2) | In this group the following term is used with the meaning indicated: <ul style="list-style-type: none"> – “harmful chemical substances” are chemical waste substances which are too hazardous or toxic to be discarded in an ordinary municipal landfill. [2007.01] | 3/20 | . by hydropyrolysis or destructive steam gasification, e.g. using water and heat to effect chemical change [2007.01] |
| (3) | In this group, at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place. [2007.01] | 3/30 | . by reacting with chemical agents [2007.01] |
| (4) | In this group, it is desirable to add the indexing code(s) of group A62D 101/00 relating to the nature of the harmful chemical substance. [2007.01] | 3/32 | . . by treatment in molten chemical reagent, e.g. salts or metals [2007.01] |
| | | 3/33 | . . by chemically fixing the harmful substance, e.g. by chelation or complexation [2007.01] |
| | | 3/34 | . . Dehalogenation using reactive chemical agents able to degrade [2007.01] |
| | | 3/35 | . . by hydrolysis [2007.01] |
| | | 3/36 | . . Detoxification by using acid or alkaline reagents [2007.01] |
| | | 3/37 | . . by reduction, e.g. hydrogenation [2007.01] |
| | | 3/38 | . . by oxidation; by combustion [2007.01] |
| | | 3/40 | . by heating to effect chemical change, e.g. by pyrolysis [2007.01] |
| | | 5/00 | Composition of materials for coverings or clothing affording protection against harmful chemical agents |
| | | 7/00 | Composition of materials for transparent parts of gas-masks, respirators, breathing bags, or helmets |
| | | 7/02 | . Clear-view sheets which prevent the formation of water drops or ice (materials for minimising adherence of ice or water to surfaces C09K 3/18) |
| | | 9/00 | Composition of chemical substances for use in breathing apparatus (production of oxygen-generating compounds in general, processes for the production of oxygen from chemicals in general C01B 13/00, C25B 1/02) |
| 3/02 | . by biological methods, i.e. processes using enzymes or micro-organisms [2007.01] | | |
| 3/10 | . by subjecting to electric or wave energy or particle or ionizing radiation [2007.01] | | |
| 3/11 | . . Electrochemical processes, e.g. electro dialysis [2007.01] | | |
| 3/115 | . . . Electrolytic degradation or conversion [2007.01] | | |
| 3/13 | . . to sonic energy [2007.01] | | |

Indexing scheme associated with group A62D 3/00 relating to the nature of the harmful chemical substances

101/00 *Harmful chemical substances made harmless, or less harmful, by effecting chemical change [2007.01]*

When indexing a substance in groups A62D 101/02 - A62D 101/08, indexing according to its chemical structure may also be made in one or more of groups A62D 101/20 - A62D 101/40. [2007.01]

- 101/02 . Chemical warfare substances, e.g. cholinesterase inhibitors [2007.01]
- 101/04 . Pesticides, e.g. insecticides, herbicides, fungicides or nematocides [2007.01]
- 101/06 . Explosives, propellants or pyrotechnics, e.g. rocket fuel or napalm [2007.01]

- 101/08 . Toxic combustion residues, e.g. toxic substances contained in fly ash from waste incineration [2007.01]
- 101/20 . Organic substances [2007.01]
- 101/22 . . containing halogen [2007.01]
- 101/24 . . containing heavy metals [2007.01]
- 101/26 . . containing nitrogen or phosphorus [2007.01]
- 101/28 . . containing oxygen, sulfur, selenium or tellurium, i.e. chalcogen [2007.01]
- 101/40 . Inorganic substances [2007.01]
- 101/41 . . Inorganic fibers, e.g. asbestos [2007.01]
- 101/43 . . containing heavy metals, in the bonded or free state [2007.01]
- 101/45 . . containing nitrogen or phosphorus [2007.01]
- 101/47 . . containing oxygen, sulfur, selenium or tellurium, i.e. chalcogen [2007.01]
- 101/49 . . containing halogen [2007.01]